

The Dragon's Fighters

Chengdu J-10

Long regarded as a beneficiary from the cancelled Israeli Lavi fighter aircraft programme, the Chengdu J-10 is perhaps the most successfully designed frontline combat aircraft in service with PLAAF, matching capabilities with its western opponents like the F-15/ F-16/ Mirage 2000.

Its development started as a requirement to create a fourth-generation fighter aircraft in 1983 at CAC. Meant to be a J-7 replacement, the first prototype flew in 1998,

largely helped by the Israelis and Russians. A single Russian AL-31FN (series 1) turbofan powered the J-10 prototype and the first J-10A regiment was formed in 2004. The J-10 currently equips nine PLAAF frontline units, as well as the PLAAF's Aerial Demonstration team *Ba Yi* (August First), which was formed in 2009.

The final J-10A rolled off the production line in Chengdu in 2014. Its armament consists of the PL-12 AAM, LS500J PGMs and the K/JDC-01 FLIR targeting pod. In 2009, the J-10B was unveiled with a new fixed diverter less inlet (DSI), a flatter radome, an Infra-Red Search & Tracking Unit (IRST) and a holographic HUD. Although powered by the Russian AL-31FN (series 3) turbofan, it is believed that the domestic WP-10B engine has been mated to this version by 2013. The radar sensor is a X-band passive electronically scanned array (PESA) developed by No. 607 Technical Institute. The first frontline J-10B unit was formed

Clearly displaying its resemblance to the Israeli Lavi, the J-10B is part of the PLAAF's potent fourth generation fighter force and replacing the older J-7/8 fleet

in 2015 and at the same time the first J-10C, equipped with an AESA radar developed by the 14th Institute, and manufactured with greater use of composite material and the WS-10B made an appearance at Chengdu in late 2014. The Block 02 J-10C will replace the Block 01 J-10B on the production lines and probably all J-10 variants will be brought to the J-10C standard by 2022. By mid 2016, a total of 350 J-10s had entered active service with the PLAAF. Though not part of the WTC forces, J-10As have been consistently seen operating out of Gonggar and Shigatse in Tibet over the past few years. In all probability, some of the WTC regiments will be re equipped by this type by 2018. In June 2017, a J-10C flew with a PL-15 BVRAAM for the first time.



The clean lines of the J-11B, the Chinese copy of the Su-27SK, are visible clearly. The Chinese aerospace industry has done well in achieving high standards of aerospace manufacturing in the last 20 years, even if 'reverse engineered' to a great extent

Shenyang J-11

The Chinese leaned towards Russia in the 1990s for supply of a fourth-generation fighter aircraft. After due diligence in 1991, a contract was signed between Russia and China to equip the PLAAF with the Su-27SK air superiority fighter, which consisted of direct supply of the Sukhois from Russia, as well as assembly of KnAAPO's knocked down Su-27SK kits in China. 200 of these were to be license produced at Shenyang by China under the designation J-11. In 1999, an upgraded version of the J-11, equipped with new N001V/ VE radar flew for the first time and was designated the J-11A. Seven PLAAF units are equipped with this variant.

When faced by issues concerning supply of avionics and other parts from Russia, the Chinese then cancelled the contract in 2000, with about 100 kits supplied as part of the original deal. The Chinese, in their usual manner shrewdly reverse engineered the original Su-27SK into a version called the J-11B, which used Chinese-made parts instead of the original Russian components. Though accused by the Russians of flying an unlicensed copy of the original Su-27SK, the Chinese went



The J-11D prototype (D1101) under testing. The J-11D will be the most advanced version of the J-11, rivalling the Russian Su-35 in many areas. Note the flattened Radome